

U. S. DEPARTMENT OF COMMERCE  
Environmental Science Services Administration  
in cooperation with  
Cotton Economic Research and  
Bureau of Business Research of  
The University of Texas at Austin

CLIMATOGRAPHY OF THE UNITED STATES NO. 20-41

LATITUDE 33° 13' N  
LONGITUDE 97° 45' W  
ELEV. (GROUND) 815 ft.

## CLIMATOLOGICAL SUMMARY

STATION BRIDGEPORT, TEXAS

MEANS AND EXTREMES FOR PERIOD 1938 - 1967

| Month | Temperature (°F) |               |         |                |           |               |           |      | **<br>Mean degree days | Precipitation Totals (Inches) |                |      |                 |           |                |           |                          | Mean number of days |               |               |              |      |  | Month |
|-------|------------------|---------------|---------|----------------|-----------|---------------|-----------|------|------------------------|-------------------------------|----------------|------|-----------------|-----------|----------------|-----------|--------------------------|---------------------|---------------|---------------|--------------|------|--|-------|
|       | Means            |               |         |                | Extremes  |               |           |      |                        | Mean                          | Greatest daily | Year | Snow, Sleet     |           |                |           | Precip. .10 inch or more | Temperatures        |               |               |              |      |  |       |
|       | Daily maximum    | Daily minimum | Monthly | Record highest | Year      | Record lowest | Year      | Mean |                        |                               |                |      | Maximum monthly | Year      | Greatest Depth | Year      |                          | Max.                |               | Min.          |              |      |  |       |
|       |                  |               |         |                |           |               |           |      |                        |                               |                |      |                 |           |                |           |                          | 90° and above       | 32° and below | 32° and below | 0° and below |      |  |       |
| (a)   | 30               | 30            | 30      | 30             |           | 30            |           | 12   | 30                     | 30                            |                | 30   | 30              |           | 12             |           | 12                       | 12                  | 12            | 12            |              |      |  |       |
| Jan   | 55.6             | 29.7          | 42.7    | 90             | 1952+     | -1            | 1947      | 727  | 1.58                   | 2.70                          | 1946           | 2.2  | 14.0            | 1966      | 7              | 1966      | 3                        | 0                   | 2             | 21            | 0            | Jan  |  |       |
| Feb   | 59.7             | 34.2          | 47.0    | 91             | 1956      | 1             | 1951      | 535  | 1.76                   | 2.81                          | 1944           | 1.0  | 5.7             | 1956      | 2              | 1961+     | 4                        | *                   | 1             | 14            | 0            | Feb  |  |       |
| Mar   | 67.7             | 40.6          | 54.2    | 96             | 1956+     | 9             | 1943      | 381  | 1.90                   | 2.48                          | 1938           | 0.3  | 6.0             | 1942      | T              | 1965      | 4                        | 1                   | *             | 7             | 0            | Mar  |  |       |
| Apr   | 77.4             | 51.4          | 64.4    | 98             | 1963+     | 28            | 1938      | 109  | 3.63                   | 4.51                          | 1942           | T    | T               | 1938      | 0              | 0         | 5                        | 4                   | 0             | 0             | 0            | Apr  |  |       |
| May   | 84.3             | 59.9          | 72.1    | 106            | 1967      | 38            | 1954      | 20   | 4.27                   | 5.40                          | 1964           | 0    | 0               | 0         | 0              | 0         | 5                        | 11                  | 0             | 0             | 0            | May  |  |       |
| Jun   | 93.0             | 68.1          | 80.6    | 111            | 1953      | 50            | 1947      | 1    | 3.14                   | 4.73                          | 1961           | 0    | 0               | 0         | 0              | 0         | 4                        | 22                  | 0             | 0             | 0            | Jun  |  |       |
| Jul   | 98.5             | 71.1          | 84.8    | 114            | 1954+     | 53            | 1952      | 0    | 1.87                   | 3.20                          | 1962           | 0    | 0               | 0         | 0              | 0         | 4                        | 29                  | 0             | 0             | 0            | Jul  |  |       |
| Aug   | 99.4             | 69.9          | 84.7    | 115            | 1951      | 53            | 1940      | *    | 1.79                   | 2.16                          | 1950           | 0    | 0               | 0         | 0              | 0         | 3                        | 29                  | 0             | 0             | 0            | Aug  |  |       |
| Sep   | 91.2             | 62.7          | 77.0    | 111            | 1951      | 33            | 1942      | 4    | 2.56                   | 3.60                          | 1962           | 0    | 0               | 0         | 0              | 0         | 5                        | 17                  | 0             | 0             | 0            | Sep  |  |       |
| Oct   | 81.1             | 52.0          | 66.6    | 105            | 1951+     | 28            | 1952+     | 87   | 2.83                   | 5.74                          | 1959           | 0    | 0               | 0         | 0              | 0         | 4                        | 5                   | 0             | 0             | 0            | Oct  |  |       |
| Nov   | 67.6             | 40.0          | 53.8    | 91             | 1965      | 10            | 1950      | 331  | 2.02                   | 2.90                          | 1964           | T    | T               | 1957+     | 0              | 0         | 4                        | *                   | 0             | 6             | 0            | Nov  |  |       |
| Dec   | 58.4             | 32.7          | 45.6    | 90             | 1955      | 8             | 1950      | 610  | 1.78                   | 3.55                          | 1946           | 0.4  | 4.0             | 1946      | 2              | 1963      | 3                        | 0                   | 1             | 16            | 0            | Dec  |  |       |
| Year  | 77.8             | 51.0          | 64.4    | 115            | Aug. 1951 | -1            | Jan. 1947 | 2805 | 22.13                  | 5.74                          | Oct. 1959      | 3.9  | 14.0            | Jan. 1966 | 7              | Jan. 1966 | 48                       | 118                 | 4             | 64            | 0            | Year |  |       |

(a) Average length of record, years.

+ Also on earlier dates, months, or years.

T Trace, an amount too small to measure.

\* Less than one half.

\*\* Base 65°F

### THE CLIMATE OF BRIDGEPORT, TEXAS

Bridgeport is located in west central Wise County approximately 44 miles northwest of Fort Worth. The town originated shortly before the Civil War with the building of a bridge across the West Fork of the Trinity River for use by the Butterfield Overland Mail Route. Lake Bridgeport is only four miles west of the town, accessible from Farm Roads 1658 and 2475. The 10,400-acre lake is a popular recreational area for all types of water sports. Campsites, picnic areas and boating facilities are at lakeside; sportsmen enjoy good fishing throughout the year.

Wise County is rolling prairie drained by the Trinity River and tributaries. Soils are mostly clay, black loam, sandy, and alluvial types. Elevations range from 650 to 1,300 feet. Oil, gas, stone, sand, gravel, and clays are produced. Wise is a leading dairy county; one-half of farm income is derived from dairy products. Beef cattle account for one-third of farm income. Hay, grain sorghums, peanuts, and oats are principal crops.

The climate of Bridgeport is subtropical with dry winters and hot humid summers. The annual range in temperature is extreme, characteristic of a continental environment. Tropical maritime air masses largely control the weather from late spring through early fall while modified polar air masses predominate in winter. Large variations in precipitation occur from month to month and from year to year. Mean annual total precipitation is 29.13 inches. Heavy spring rains in 1920, 16.23 inches during the month of May alone, resulted in a total for the year of 54.55 inches, the wettest year of record. Only 15.56 inches fell in 1910, the driest year. Prevailing winds are southerly throughout the year. The area receives approximately 67 percent of the total possible sunshine annually. This varies seasonally from about 50 to 60 percent in winter to between 70 and 80 percent in summer. Mean annual relative humidity is 79 percent at 6:00 a.m., 53 percent at noon, and 49 percent at 6:00 p.m., Central Standard Time.

**Winter:** Surges of cold polar and arctic air masses are common. Cold fronts are often accompanied by strong, gusty, northerly winds, and sudden drops in temperature. Precipitation is the least during the winter and is associated with frontal activity. It may fall as rain, freezing rain, sleet or snow. Snowfall averages 3.9

inches annually, but this mean value is unduly biased by rare, exceptionally heavy snows that may occur once in 10 to 15 years. On the whole, winters are mild. Even in January and February cold spells are brief, and fair, mild weather often occurs. Maximum temperatures of 90°F or above have occurred in each of the winter months.

**Spring** is a very pleasant season. March has warm and cool spells of short duration; temperature changes are often pronounced. Cloudiness decreases while showery-type precipitation increases. Thunderstorm days increase to an average of 4 in March, 7 in April, and 6 in May. Late spring thunderstorms are sometimes accompanied by destructive hail and windstorms. Showers and thunder-showers are most frequent during the afternoon and evening hours. March and April are the windiest months of the year. May is normally the wettest month.

**Summer:** Daytime temperatures are hot. Thundershowers and an occasional cool front bring a variety of weather during June, but both July and August are hot, dry months that offer little change in the day-to-day progression of the weather. Daily temperature maxima of 100° or above are not uncommon; however, the relative humidity is usually low during these hot spells and evaporative-type home air-conditioners operate effectively about 80 percent of the time.

**Fall** is a delightful season. Temperatures are pleasant, wind speeds are most often light, and periods of sunny, dry weather are frequent. The season is well suited to all types of outdoor activities except swimming. From September through November showery type precipitation is gradually replaced by steady, more gentle rains. Total monthly precipitation is greater than in late summer, or in winter, but less than in the spring.

The growing season (freeze free period) at Bridgeport averages 220 days. The mean dates of the last occurrence of 32° in the spring and the first occurrence of 32° in the fall are March 31 and November 6, respectively. Significant departures from these mean dates may exist locally, and in the surrounding area, because of differences in topography, exposure, soil type and condition, and vegetative cover. Mean annual lake evaporation is estimated at 60 inches.

## BRIDGEPORT, TEXAS

## Average Temperature (°F)

| Year | Jan. | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Ann'l |
|------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|
| 1938 | 45.4 | 50.2 | 60.0 | 60.0 | 70.1 | 79.2 | 82.8 | 84.9 | 77.4  | 68.1 | 49.4 | 44.2 | 64.3  |
| 1939 | 46.0 | 41.0 | 57.4 | 62.7 | 70.4 | 75.6 | 86.9 | 83.1 | 80.9  | 68.2 | 50.7 | 47.6 | 65.1  |
| 1940 | 32.2 | 45.4 | 57.8 | 62.7 | 70.4 | 75.6 | 86.9 | 83.1 | 80.9  | 68.2 | 50.7 | 47.6 | 65.1  |
| 1941 | 46.2 | 44.6 | 48.8 | 63.0 | 73.2 | 78.8 | 82.8 | 81.7 | 76.4  | 68.7 | 52.7 | 47.6 | 63.4  |
| 1942 | 39.4 | 46.0 | 53.0 | 63.3 | 69.6 | 74.8 | 82.8 | 83.6 | 72.8  | 63.9 | 58.2 | 46.0 | 63.1  |
| 1943 | 42.4 | 50.8 | 48.8 | 68.0 | 71.4 | 81.5 | 85.4 | 88.4 | 77.4  | 65.0 | 53.6 | 42.4 | 64.6  |
| 1944 | 44.0 | 49.1 | 53.0 | 63.6 | 70.4 | 79.0 | 80.8 | 82.6 | 74.0  | 66.0 | 56.0 | 42.0 | 64.2  |
| 1945 | 43.0 | 47.0 | 58.7 | 61.2 | 70.4 | 79.0 | 80.8 | 82.6 | 74.0  | 66.0 | 56.0 | 42.0 | 64.2  |
| 1946 | 42.8 | 50.8 | 48.8 | 68.0 | 71.4 | 81.5 | 85.4 | 88.4 | 77.4  | 65.0 | 53.6 | 42.4 | 64.6  |
| 1947 | 42.8 | 42.3 | 49.6 | 67.6 | 69.6 | 78.2 | 85.2 | 84.7 | 74.2  | 68.0 | 50.5 | 47.2 | 64.3  |
| 1948 | 42.8 | 42.3 | 49.6 | 67.6 | 69.6 | 78.2 | 85.2 | 84.7 | 74.2  | 68.0 | 50.5 | 47.2 | 64.3  |
| 1949 | 37.8 | 44.0 | 51.8 | 70.0 | 73.3 | 82.4 | 86.1 | 85.9 | 77.1  | 64.9 | 54.6 | 48.7 | 64.7  |
| 1950 | 46.9 | 50.8 | 53.8 | 67.4 | 71.8 | 80.7 | 85.8 | 82.0 | 74.0  | 69.3 | 53.0 | 44.7 | 63.9  |
| 1951 | 44.7 | 46.8 | 54.8 | 67.4 | 71.8 | 80.7 | 85.8 | 82.0 | 74.0  | 69.3 | 53.0 | 44.7 | 63.9  |
| 1952 | 52.3 | 53.3 | 54.1 | 62.0 | 71.7 | 80.8 | 86.5 | 89.1 | 77.8  | 68.7 | 49.9 | 44.8 | 65.2  |
| 1953 | 50.1 | 49.1 | 60.5 | 61.6 | 71.4 | 82.1 | 86.2 | 80.7 | 77.2  | 68.1 | 53.1 | 44.8 | 65.9  |
| 1954 | 45.0 | 45.3 | 54.2 | 60.1 | 70.1 | 80.0 | 86.2 | 80.7 | 77.2  | 68.1 | 53.1 | 44.8 | 65.9  |
| 1955 | 44.8 | 45.3 | 54.2 | 60.1 | 70.1 | 80.0 | 86.2 | 80.7 | 77.2  | 68.1 | 53.1 | 44.8 | 65.9  |
| 1956 | 42.0 | 46.8 | 55.7 | 63.6 | 70.8 | 79.8 | 88.1 | 85.5 | 74.9  | 61.3 | 50.7 | 49.1 | 63.4  |
| 1957 | 42.6 | 51.8 | 51.3 | 60.6 | 70.8 | 79.8 | 88.1 | 85.5 | 74.9  | 61.3 | 50.7 | 49.1 | 63.4  |
| 1958 | 43.2 | 42.1 | 47.4 | 61.0 | 71.9 | 81.9 | 84.9 | 83.9 | 78.2  | 62.5 | 47.0 | 49.1 | 63.4  |
| 1959 | 40.1 | 46.6 | 54.3 | 62.2 | 70.0 | 80.4 | 81.5 | 83.8 | 79.2  | 69.1 | 56.4 | 41.7 | 63.6  |
| 1960 | 43.1 | 41.3 | 46.4 | 62.0 | 72.1 | 77.6 | 82.0 | 82.5 | 75.7  | 66.6 | 52.0 | 44.3 | 63.5  |
| 1961 | 39.8 | 41.2 | 57.2 | 62.3 | 72.2 | 78.6 | 85.1 | 84.8 | 76.1  | 65.9 | 53.8 | 45.9 | 64.6  |
| 1962 | 37.1 | 53.0 | 51.8 | 62.3 | 72.2 | 78.6 | 85.1 | 84.8 | 76.1  | 65.9 | 53.8 | 45.9 | 64.6  |
| 1963 | 35.3 | 44.7 | 57.5 | 69.3 | 73.6 | 81.8 | 87.9 | 86.9 | 78.9  | 73.0 | 56.1 | 38.6 | 65.3  |
| 1964 | 42.8 | 43.0 | 53.6 | 68.0 | 74.2 | 80.6 | 88.7 | 85.7 | 76.8  | 62.7 | 56.8 | 44.4 | 64.8  |
| 1965 | 45.9 | 44.3 | 45.3 | 67.4 | 72.6 | 79.6 | 86.3 | 83.7 | 78.8  | 64.1 | 59.7 | 48.9 | 64.7  |
| 1966 | 38.5 | 43.5 | 55.7 | 63.2 | 70.8 | 79.0 | 86.7 | 81.8 | 73.4  | 63.2 | 59.1 | 43.1 | 63.2  |
| 1967 | 45.2 | 45.5 | 62.6 | 70.4 | 71.5 | 81.0 | 83.5 | 83.8 | 72.6  | 64.9 | 53.2 | 43.9 | 64.8  |

## STATION HISTORY

Rainfall observations began at Bridgeport on September 1, 1938; temperature observations began on February 27, 1935. The station was moved several times, but each new location was within one-half mile of the post office and not more than 0.5 mile from the previous location. Mr. William M. Hembree, the present Cooperative Observer was appointed June 15, 1942; and the station moved to his residence at 1410 Carpenter Street. This location is 0.3 mile east of the new post office building. Station equipment consists of a cotton region shelter, maximum and minimum thermometers and a standard eight-inch rain gage. Data are published monthly in CLIMATOLOGICAL BULLETIN TEXAS. Station index number: 41-1053-03.

Weather Bureau State Climatologist  
Environmental Science Services Administration  
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September 1968

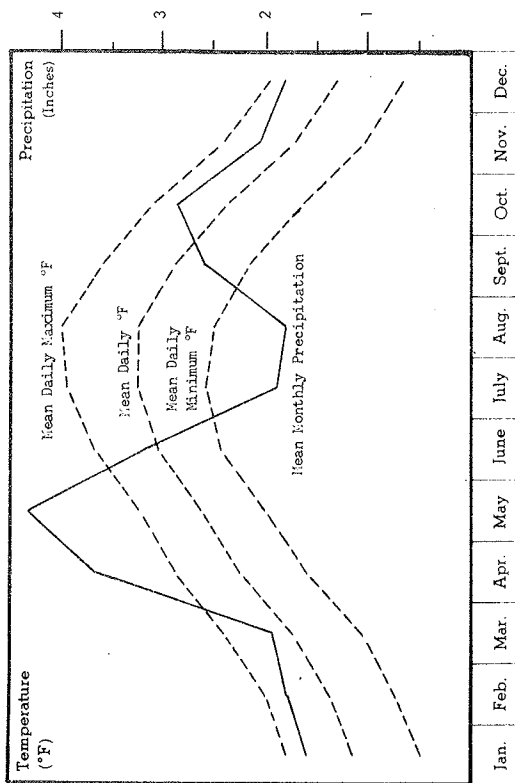
## BRIDGEPORT, TEXAS

## Total Precipitation (Inches)

| Year | Jan. | Feb. | Mar. | Apr.  | May  | June | July | Aug. | Sept. | Oct.  | Nov. | Dec. | Ann'l |
|------|------|------|------|-------|------|------|------|------|-------|-------|------|------|-------|
| 1938 | 2.46 | 1.61 | 5.55 | 3.20  | 3.07 | 2.16 | 0.61 | 0.52 | 0.61  | 0.03  | 2.03 | 1.21 | 23.06 |
| 1939 | 2.80 | 1.39 | 0.86 | 1.27  | 2.49 | 2.91 | 1.10 | 2.93 | 0.28  | 1.12  | 2.20 | 0.77 | 20.12 |
| 1940 | 0.40 | 2.92 | 0.92 | 4.59  | 5.63 | 5.88 | 4.62 | 2.23 | 2.83  | 0.39  | 7.68 | 4.06 | 42.25 |
| 1941 | 0.67 | 4.05 | 1.20 | 4.51  | 1.65 | 7.68 | 1.74 | 3.23 | 1.15  | 10.04 | 0.55 | 1.59 | 38.10 |
| 1942 | 0.39 | 0.37 | 1.20 | 25.22 | 4.68 | 3.93 | 0.13 | 2.64 | 2.78  | 6.24  | 0.23 | 1.54 | 39.55 |
| 1943 | 0.24 | 0.62 | 3.59 | 1.18  | 7.20 | 4.10 | 0.47 | 0    | 0.60  | 1.33  | 0.22 | 3.75 | 23.60 |
| 1944 | 2.47 | 5.60 | 2.36 | 5.15  | 5.36 | 1.25 | 0.90 | 4.28 | 2.55  | 1.78  | 3.69 | 3.74 | 39.88 |
| 1945 | 1.62 | 3.78 | 3.18 | 2.22  | 1.36 | 2.76 | 6.00 | 1    | 6.20  | 3.64  | 0.88 | 0.44 | 35.18 |
| 1946 | 4.77 | 2.68 | 2.93 | 2.83  | 4.88 | 3.82 | 1.21 | 3.11 | 6.20  | 3.64  | 0.88 | 0.44 | 35.18 |
| 1947 | 0.81 | 0.21 | 2.99 | 5.03  | 3.64 | 3.62 | 0.55 | 0.68 | 1.81  | 1.30  | 4.28 | 5.71 | 38.10 |
| 1948 | 1.69 | 3.52 | 1.05 | 1.42  | 3.36 | 3.30 | 1.07 | 1.71 | 0.83  | 1.76  | 0.53 | 0.31 | 20.75 |
| 1949 | 3.74 | 1.50 | 2.41 | 1.94  | 6.00 | 3.35 | 0.65 | 2.43 | 3.43  | 4.21  | 0    | 1.55 | 31.21 |
| 1950 | 1.63 | 1.72 | 0.13 | 5.79  | 5.68 | 5.84 | 6.01 | 2.85 | 3.30  | 2.13  | 1.19 | 0.02 | 20.49 |
| 1951 | 0.11 | 1.84 | 0.79 | 1.54  | 3.69 | 4.00 | 2.56 | 0.59 | 2.02  | 0.02  | 1.91 | 0.73 | 20.27 |
| 1952 | 0.49 | 0.56 | 2.63 | 4.22  | 3.68 | 0.37 | 1.00 | 0.03 | 0.72  | 0.82  | 6.38 | 1.91 | 0.73  |
| 1953 | 0.10 | 0.69 | 2.17 | 2.06  | 3.68 | 1.25 | 1.93 | 1.63 | 0.94  | 3.13  | 0.53 | 2.02 | 19.47 |
| 1954 | 1.96 | 0.12 | 0.18 | 1.41  | 4.69 | 0.71 | 1.91 | 1.67 | 0.94  | 0.34  | 0    | 0.80 | 21.45 |
| 1955 | 1.30 | 1.01 | 0.82 | 2.50  | 4.87 | 0.71 | 1.09 | 0.85 | 2.19  | 1.71  | 1.38 | 3.75 | 18.20 |
| 1956 | 1.76 | 2.34 | 0.20 | 0.48  | 3.67 | 0.30 | 2.21 | 0.40 | 0     | 1.71  | 5.93 | 1.04 | 47.71 |
| 1957 | 1.25 | 4.62 | 2.84 | 0.24  | 8.34 | 3.83 | 0.32 | 0.49 | 3.64  | 4.57  | 5.93 | 0.50 | 30.14 |
| 1958 | 2.05 | 0.36 | 1.30 | 0.41  | 1.62 | 4.72 | 2.43 | 1.88 | 1.85  | 11.47 | 1.00 | 2.50 | 29.69 |
| 1959 | 0.05 | 0.66 | 1.30 | 0.41  | 1.62 | 4.72 | 2.43 | 1.88 | 1.85  | 11.47 | 1.00 | 2.50 | 29.69 |
| 1960 | 3.73 | 1.69 | 1.20 | 1.40  | 2.10 | 2.16 | 2.91 | 1.92 | 2.30  | 3.71  | 2.02 | 1.42 | 29.31 |
| 1961 | 3.31 | 1.92 | 3.30 | 0.33  | 2.19 | 7.64 | 1.37 | 0.92 | 2.30  | 2.59  | 2.02 | 1.42 | 29.31 |
| 1962 | 0.30 | 0.73 | 1.48 | 6.35  | 6.95 | 6.60 | 6.96 | 1.53 | 9.49  | 3.82  | 2.87 | 0.84 | 43.18 |
| 1963 | 0.07 | 0.10 | 0.27 | 4.36  | 2.02 | 2.05 | 0.96 | 1.53 | 0.98  | 1.85  | 2.08 | 1.06 | 16.73 |
| 1964 | 3.30 | 1.03 | 2.47 | 3.66  | 7.08 | 2.11 | 0.20 | 4.83 | 5.94  | 0.93  | 7.00 | 0.55 | 38.20 |
| 1965 | 1.82 | 1.37 | 0.89 | 1.99  | 5.04 | 2.56 | 0.07 | 2.35 | 3.94  | 2.03  | 0.80 | 1.60 | 22.95 |
| 1966 | 2.10 | 2.54 | 4.46 | 4.46  | 4.11 | 2.73 | 0.82 | 2.83 | 3.88  | 0.73  | 0.45 | 1.60 | 26.71 |
| 1967 | 1.11 | 1.11 | 1.26 | 2.37  | 7.73 | 1.15 | 0.90 | 0.71 | 4.17  | 2.00  | 0.94 | 1.47 | 23.81 |

T - Trace

## Monthly Temperatures and Precipitation



Single copies of this summary are available without charge from the Bureau of Business Research, The University of Texas, Austin, Texas 78712. Quantity rates upon request.